G. R. S. 58]

Previous references.

Geol 20-15 (1-12)

1915.

(Geol)

File No. 75-15

Serial Nos. 1-16

Later references.

Preserve

GENERAL AND REVENUE SECRETARIAT.

Serial Nos.

Part B for April 16

SUBJECT.

Re: Antimony ore available in the State

To. I. A. R. Pol no: 1021 of 8.4.16.

Sir,

With reference to your letter quoted above, I am directed to forward a copy of a note drawn up by the Director, Geological Survey, about the Antimony ore at Chitaldrug and to suggest that a cable may be sent to the Secretary of State in advance to the Govt. of India.

W D 1351—GPB—20,000—13-12-15

18/7/16

R. S. 11] 1915-16.

GENERAL AND REVENUE SECRETARIAT.

(Geology)

NOTES.

File No. 75-15

FILE HEADING.

Antimony ore available in the State

From

No.	Dated	Received

Diary No.	Enclos.	Spare Copies.	Serial No.

BRIEF ABSTRACT OF LETTER.

NOTES AND ORDERS.

Geol. 75-15

G.R.S. 13]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

1) From the Hon'ble the Resident in Mysore.
D.O. letter dt. 11-2-16.

Forwards copy of telegram dt. 10-2-16 from "Foreign" Delhi, stating that Govt. of India desire to obtain large supply of antimony & that Mr. J. Nesr of Melrose, Bangalore, claims to have large deposit of Stibnite in Chitaldrug Dt. & suggests that Mysore Govt. may obtain the opinion of Dr. Russell on the matter & that a reply may be sent as early as possible.

2) From Dr Russell, Director M.G.
D.O. letter dt. 11-2-16.

Furnishes his opinion in the matter

3) To the Hon'ble the Resident
D.O. No 3800 dt. 11-2-16.

Forwards copy of D.O. letter dt. 11-2-16 received from Dr Russell

4) From the H.A. Resident
D.O. No. 1842 dt. 15-3-16.

Requests that Dr Russell may be asked to take 2 tins of average sample of antimony ore of the mine's ore stock & in the result early.

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

GPB—50,000—5-8-15

Geol 75-15

G.R.S. 13]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

5) To Dr Russell ~~Dir. Ct~~ Director D.M.C.
D.O. 3860 dy 15-3-16.

Forwards copy of D.O. letter no 1862 dy 15-3-16 from the 7 A. Resident & requests him to furnish the required information.

6) From Dr Russell Director D.M.C.
D.O. letter dy 16-3-16.

States that he will see the 7. A. Resident to settle matters & that it will take about a week to get the sample.

7) From Dr Russell
D.O. no 2076 dy 16-3-16.

States that he had seen Mr Walbeehm & it is ascertained that the Govt of India wants is that the results of the analyses should be reported etc & requests Sanction & Govt to take his motor to Malakka & back by rail

8) To Dr Russell
D.O. no 3863 dy 16-3-16.

States that Govt will have no objection to his using ethital during & take his motor by rail to Malakka

N.B.—Should routine notes be written on small slips, the notes must be copied or slips pasted on this form.

GPB-- 50,000—5-8-15

Geol 75-15.

G.R.S. 13]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

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9) To Mr. P. B. Warburton

D.O. no 3874 dy 18-3-16.

States with refce to his D.O. no 1842 dy 15-3-16, that the result of the enquiries about antimony ore found in the State will be communicated as soon as received.

10) From Mr A. R. Cole

D.O. letter no 2148 dy 27-3-16

Requests to be informed when the result of analysis of the sample of antimony ore taken out of Mr Burr's ore stock may be expected

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

GPB—50,000—5-8-15

G.R.S. 13]

Geol 75-15.

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

No. 30708 28-3-16

S.O. No 2148 d/ 27.3.16
from Dist Test Regd
&
Dewni's order thereon

I have just made an
Enquiry by telephone
with the Registrar of
the Dept of Mines &
Geology & have been in-
formed that Dr Smeeth
had an Enquiry from
the Dewni's offic on this subject
& that
& the S.O. is under issue
from him to the Dewni
stating that the
report on the Enquiry
one may be Expected
by the End of this
week.

(M. Dey.) 28/3-16

2 A draft reply to
D. A. R may be put up
accdly

28/3

N.B.—Should routine notes be written on small slips, the notes must be copied or slips pasted on this form.

GPB—50,000—5-8-15

Geol 75-15.

G.R.S. 13]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

3 Draft D.O. submitted for Appl

28/3-16

(H. Leng.)

4 The letter may issue & the file may be sent back for subn. to Govt

From Dr Smeeth D.O. No 3070, 28/3/16 requesting that he may be given facilities for splitting & forwarding the ore stocks into two grades & sending samples to laboratory etc.

28/3

5 A revised draft in lieu of that in connection with Dr Smeeth's D.O. of 28/3 (No. 3070) is put up for Appl.

28/3-16

(H. Leng.)

6 The draft may issue

~~What also~~

7 A letter may be sent to Dr Smeeth stating that the further reports must

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

GPB—50,000—5-8-15

Gen 75-15. 6

G.R.S. 13]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

---

be sent as early as practicable

& Paragraph 3 of Dr Sweetman's letter seems to call for further action -

NLL
28/3/16

9 Send Memo to Appl.

28/3/16

12) C.S. No 72 d - 28.3.16
To the 7-A-Resident.
Forward an extract (para 12) of Dr. Sweetman's letter & informs that the results of the analysis will be communicated immediately on receipt.

NLL
29/3/16

10) To the Supdt. Vaccinator as per para 7 to be asked to see Dr. Mukherjee Resp.

N.B.—Should routine notes be written on small slips, the notes must be copied or slips pasted on this form.

GPB—50,000—5-8-15

M.R. 1070/Cr. 7

G.R.S. 13]

Geol 75-15

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

For Signature.

Thereafter Take Extracts.

~~After~~ Form D Sheets Concerning D.O. & Make marginal & deal with them.

29/3-16

Issued: No 13533 dated 29/3/16 WA.

13)

To Dr. W. F. Smeeth

~~To~~ The Director, Dept of Mines & Geology.

D.O. No. Cr. 13533 dt 29-3-16

Acknowledges the receipt of his D.O. no 3070 dt 28-3-16 and requests that the results of the analyses of antimony ore & his report thereon may be sent early as the Govt of India seem to be anxious about the matter.

I should think the rule that a communication shd relate to a single subject should have been relaxed in this case, to increase work here

Draft 31/3

12) Extracts from D.O. letter no 3070 dt 28-3-16 have been taken for being separately dealt with. The file has been submitted with reference to ord in paragraph 4.

A.W.S. Kus 29-3-16.

29/3-16

H. Keay.)

13) There is little use in troubling the Director at this stage. Kindly telephone today to the Geological Survey to ascertain when the results may be expected & make a note in office today with the reply

Draft 31/3

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

GPB—50,000—5-8-15

G.R.S. 13]

Gol 75-15.

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

14) As per Secretary's order, it is ascertained from the Geological Office that samples have been sent to the Laboratory and that the report on the results may be expected tomorrow or on Monday (3rd April).

AHS. 31/3/16

15) Please send up with Asst after getting the results. To be returned again if not rec'd in time

Dmr 31/3

LG

from Gol the 31/3-16

16) Ascertained by telephone that the results have not been received yet & that enquiry will be made today & the particulars communicated.

LG 5/4-16

Subdt. 17) It is ascertained that the results are expected to be received in the Geological office on Friday afternoon and the report will be sent to this office on Saturday the 8th inst.

AHS, Hms 5-4-16.

18) Time for DC-DO to Residency now

LG 6/4-16

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

GPB—50,000—5-8-15

Geol 75-15.
884/6

9

G.R.S. 13]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

14) To Major F. H. St. George Tucker,
7. A. Rexdeal.

D.O. no. Pol 1010 D 6-4-16.

States that the results of the analysis of Mr. Burn's antimony ore will be communicated to him early next week.

14A) To Dr Smellie, D.O. no. 3974 D 7-4-16, acknowledges the receipt of Sl 11 etc.

15) From Dr. Smellie, Director, G.M.Cr.

D.O. no 3192 D 8-4-16.

Forwards a note in duplicate about the Antimony at Chital ding.

16) To Major F. H. St George Tucker.
7. A. Rakideal

D.O. no Pol 1012 D 8-4-16.

Forwards a copy of the note drawn up by Dr Smellie about the Antimony at Chitaldurg. & suggests the form text of a wire to be sent in advance to the Govt of India if necessary.

19) He communicates as personally desired

LG 10/4-16

218/12.4.16

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

For Member Lees. & Dewar) 20) For Kind perusal. Dew. 11/4

GPB—50,000—5-8-15

21) 12.4. LG 12/4-16

Dew 13/4

G.R.S. 13]

8896 Geol 75-15.

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

5-504
13.4.16

22) Shown to Dewan
HB
13/4-16

23) Seen by Dewan
Mukh
14 4 16

B

Dewan 14/4
HB
14/4-16

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

GPB--50,000—5-8-15

Geol 75-15-1. D. O. No. 7r3352.

II/2/1916

My dear Deoran Sahib

Please see the enclosed telegram, received this morning.

I shall be very much obliged if you will kindly treat the matter as urgent & place me in a position to send a very early reply.

Yours very sincerely

A Daly

12

Telegram dated 10th February 1916 from "Foreign" Delhi, to the Hon'ble the Resident in Mysore.

****

539. D. Ministry of munitions desire to obtain large supply of antimony ore containing not less than fifty per cent metallic antimony. Director, Geological Survey of India wires, begins: J. Burr of Melrose, Bangalore claims to have large deposit of stibnite at Chikananalli in Chitaldrug District in Mysore State. stop. He says sixty tons ready stacked for which he is seeking market. stop. I referred him last November to Watsons and other Home brokers. stop. Would suggest reference to Mysore Durbar for full enquiry and particulars. stop. Burr's estimate of his ore not improbable optimistic and Durbar could get exact opinion from Doctor Smeeth ends. Please investigate and telegraph result soon as possible.

****

" C o p y "

Telegram dated 10th February 1916 from "Foreign" Delhi, to the Hon'ble the Resident in Mysore.

****

539. D. Ministry of munitions desire to obtain large supply of antimony ore containing not less than fifty per cent metallic antimony. Director, Geological Survey of India wires, begins: J. Burr of Melrose, Bangalore claims to have large deposit of stibnite at Chikananalli in Chitaldrug District in Mysore State. stop. He says sixty tons ready stacked for which he is seeking market. stop. I referred him last November to Watsons and other Home brokers. stop. Would suggest reference to Mysore Durbar for full enquiry and particulars. stop. Burr's estimate of his ore not improbable optimistic and Durbar could get exact opinion from Doctor Smeeth ends. Please investigate and telegraph result soon as possible.

****

" C o p y "

Jol 75-15-2 2-3353

14

Bangalore

11th February 1916

Dear Sir Visvesvaraya,

I return herewith Sir Hugh Daly's letter and telegram about Mr Burr's antimony ore in the Chitaldrug District.

My opinion as to the quantity and grade of the ore may be expressed as follows; I have put it in a form which can be conveniently telegraphed:-

" Dr Sweeth reports no large quantity of antimony ore in Mysore State. In Chitaldrug a few tons of siliceous ore available from which picked samples of oxide ore contain about thirty five per cent antimony and picked samples of sulphide ore contain

about ~~not~~ thirty eight per cent antimony. There may be some twenty tons sul-phide ore available which could be dressed a few per cent higher."

Yours Sincerely.

(sd) W. F. Smeeth.

Sir M. Visvesvaraya K.C.S.I.,

Dewan of Mysore

Yeol 75-15-3. Bangalore
11 Feb 16.

3800/En: Two

16

To

The Hon'ble the Resident in Mysore.

My dear Sir,

I am in receipt of your D.O. of date ~~about~~ regarding the antimony ore available in the Mysore State.

I ~~have~~ consulted Dr. Smeet in person - He ~~took some time~~ went both to his office & has sent the enclosed ~~in the matter and enclose for your information his~~ which embodies letter to me ~~giving~~ his opinion on the ~~same~~ questions.

I return the telegram ~~in record~~ in original, ~~for reference~~ with thanks

Yours very sincerely,

Dewan.

11.2.16

Very urgent. Geol 75-15-4. D. O. No. Fr 3420

D. O. No. 1842. BANGALORE.
15th March 1916.

My Dear Dewan Sahib

With reference to the correspondence ending with Sir Hugh Daly's letter dated the 11th February 1916, regarding antimony ore etc., available in the Mysore State, I am desired to request that you will kindly ask Dr. Smeeth to take an average -- sample of antimony weighing say 2 tons out of Mr. Burr's ore stock and intimate the result to me at a very early date. The Government of India have telegraphed for this information.

Yours sincerely
[illegible]

Sir M. Visvesvaraya, K.C.I.E.,
Dewan of Mysore.

J.A.

D. O. No. 3869

Genl 75-15-5.
15/3/16

Secret

15

Dear Dr. Sweetman,

I enclose copy of D.O. letter no 1842 of date from Mr Warburton asking for particulars of ~~D.O.~~ cautionary ore found in ~~Ahmednagar District~~ Nyasaland.

I shall be much obliged if you will kindly furnish ~~me with~~ the required information as early as may be practicable ~~possible~~.

Yours Sincerely

15.3.16

(Osmond)

Dr. W. J. Sweetman,
M.A. &c.

Geol 75-15-6. D. O. No. 7-3421

DEPARTMENT OF MINES AND GEOLOGY,
MYSORE STATE.

Bangalore, 16. 3. 1916.

Dear Sir Visvesvaraya

With reference to your

D[illegible] received last night

about Cardamom Oil

I am not at all clear

as to what the Govt

of India want

What am I to do with

the average sample

weighing 2 tons? Am
I to send it to the Govt of
India and what is the
nature of the result which
I am to intimate?
Perhaps you would like
me to see Mr Warburton
settle matters with him.
It will involve my going
to the Chitaldrug District &
will take about a week to
get the sample

Yours sincerely

W. Smeaton

Geol 75-15-7 D.O. No. 7.3423.
20

Urgent.

GOVERNMENT OF MYSORE

DEPARTMENT OF MINES AND GEOLOGY,
MYSORE STATE.

D.O. No. 2076. Bangalore, 16th March 1916

Imperial Sec
Mysore Res
16/3

Dear Sir Visvesvaraya,

I have seen Mr. Warburton unofficially re- antimony. His telegram shows that the Government of India want the results of the analyses reported, but this was not stated in the letter sent to me. He does not know why 2 tons is mentioned, but I think it is obvious that they merely mean that bulk samples should be taken and not that 2 tons should be sent. I shall have to send a camp out and will probably be able to get away Sunday or Monday.

I want sanction of Government to take my motor to Holalkere and back by rail and I must order the truck without delay. The mine is 42 miles from the Railway Station and I do not think I should be expected to pay for sending my motor by train or to travel by bullock cart which would take 3 or 4 days longer. If there is any difficulty about this, I presume there would be no objection to my asking the Government of India to pay for the motor car as they appear to be in a hurry and do not want unnecessary delay.

Yours sincerely,

W. F. Smeeth

Sir M. Visvesvaraya, K.C.I.E.,
Dewan of Mysore.

Geol 75-15-8. Bangalore 16th March 16

D. O. No. 386 3

Dear Dr. Smeeth,

I am in receipt of your letters of date regarding antimony ore. I am glad you have discussed the question with Mr. Warburton.

Government have no objection to your visiting ~~the~~ Chitaldrug or by rail to take your motor/to Holalkere and back. I do not think it will be right to ask the Govt. of India to pay for the motor hire ~~unless they offer to pay themselves~~

Yours sincerely,

16.3.16.

Dr. W.F.Smeeth, M.A., D.Sc.

Geol 75-15-9 Bangalore
18 Mar 16

D. O. No. 3874

My dear Mr. Warburton,

With reference to your D.O. letter No. 184 of the 15th instant asking for further particulars about antimony ore found in the State, Dr. Smeeth informs me that he has already seen you and discussed matters. He has been permitted to go to Chitaldrug in this connection & The result of his enquiries will be communicated to you as soon as ~~izzis available~~. [illegible]

Yours sincerely,

18.3.16

P.B.Warburton Esqr, I.C.S.

G.R.S. 13]

Very urgent

Geol 75-15-10. F 3469

D o No. 2148.

DIARY NO. 8499

BANGALORE.

Dear Dewan Sahib

Please refer to my Demi-Official letter No. 1842, dated the 15th March 1916 regarding antimony ore.

The Resident will be glad to know, at a very early date, when Dr. Smeeth's report on the result of analysis of the sample of antimony ore taken out of Mr. Burr's ore stack, may be expected. The Government of India have sent a reminder for the same.

Yours sincerely

A. Chatterton

for P.A.R.

Sir M. Visvesvaraya, K.C.I.E.,
Dewan of Mysore.

Note The entire previous papers ending with Dewan's D.O. No. 3874 S 18.3.16 are put up with this. CB 28/3/16

MG

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

GPB—50,000—5-8-15

D. O. No. 7 3576 DIARY NO. 8607

DEPARTMENT OF MINES AND GEOLOGY,
MYSORE STATE.

Bangalore, 28th March 1916.

No 3070

Dear Sir Visvesvaraya,

I have been to Chitaldrug and, as I expected, found that Mr. Burr's ore stacks were very mixed stuff and could not be sampled as they were. I had them pulled down and sorted into two grades —

(1) mostly sulphide ore, about 3 tons;

(2) mostly oxide ore, about 11¾ tons.

Both ores are a good deal mixed and will not, I think, assay as high as the picked samples which he sent for assay. I sampled the two new stacks separately and have sent the sample to the Laboratory and hope to get the results by the end of the week.

(1)

2. A lot of work has been done, but little ore is showing. I have suggested some further work.

3. Mr. Burr is being assisted by some Bombay people and has asked for the license to be transferred to a small Syndicate. The papers about this are with the General Secretary and I should be glad of sanction to transfer the license at once so as to get the work carried on without delay. The Syndicate are prepared to spend £ 1000 on the prospecting. Some Rs.5000 has been spent already and it is very doubtful if they will get their money back. If they have any luck and strike something better they will put up a furnace on the spot.

(2)

---

4. I hear today that the fire at Gilbert's Shaft, Mysore Mine, appears to be subsiding and it is hoped to isolate other workings from it so as to resume work in other sections. There has

(3)

has been a small subsidence at the surface of the shaft, but it has not affected the Railway and I do not think there is any risk of its doing so.

---

5. Bulletin. I have got back the first section of my Bulletin from the General Secretary with orders to get it struck. (4) What I want is permission to get the other sections printed and struck as they are ready without having to send them to the General Secretary. Will you kindly send me permission to do this ?

6. There is one other matter in which I should be glad of your assistance and that is in regard to the quarterly returns (5) of subjects engaging the attention of the Department. I have sent in several of these and I should be glad not to have to send one in for this quarter, but defer it until June next, if wanted. It will take me a couple of days to prepare and I have much more work on hand than I can tackle and should be glad to be relieved of this.

Yours sincerely,

C.P. Inverarity

Sir M. Visvesvaraya, B.A.,K.C.I.E.,&c.,

Dewan of Mysore.

Extract from D. O. letter no 3070 of 28th March 1916 from the Director, D.M.C. to the Dewan

I have been to Chitaldrug and, as I expected, found that Mr. Burr's ore stacks were very mixed stuff and could not be sampled as they were. I had them pulled down and sorted into two grades —

(1) mostly sulphide ore, about 3 tons;

(2) mostly oxide ore, about 11 3/4 tons.

Both ores are a good deal mixed and will not, I think, assay as high as the picked samples which he sent for assay. I sampled the two new stacks separately and have sent the sample to the laboratory and hope to get the results by the end of the week.

2. A lot of work has been done, but little ore is showing. I have suggested some further work.

× × × × × ×

Geol 75-15-12

C.S.72/Genl 1.
28.3.16.

Bangalore,
28th March 1916.

Dear Sir,

In reply to your demi-official letter No.2148 of yesterday to the Dewan, I am desired to ~~inform you that Dr. Smeeth has had Mr.~~ Burr's antimony ore sampled and sent the samples to the laboratory for analysis and expects to get the results by the end of this week, ~~and~~ they will be immediately communicated to you.

2. Dr. smeeth also states that the stacks contained mixed ore, which will not probably assay as high as the picked sample received from Mr. Burr for assay. Though a lot of work has been done on the blocks there is, it seems, little ore showing. Dr. Smeeth also says that he has suggested some further work to be done so as to find ~~out what the grade of ore is~~ the.

Yours sincerely,

28/3/16

The First Assistant to the Hon'ble the Resident in Mysore.

(x) (paras 192) forward herewith an extract from Dr. Smeeth's d.o. letter No 3070 of date in the matter. As soon as the results of the analysis are known, they will be immediately communicated to you.

28/3/16.

G. R. S. 26]

File No. 75-15

Serial No. 13.

Diary No. of letter replied to .....

D.O.
No. 913533

General and Revenue Secretariat
( )
, *the* 191 .

To

Dr. V. T. Sweeth, M.A.,
Dte.
Dir. D.M.G.

Date of issue 29/3/16

Signed by M. Rama Rao

Dear Sir

I am desired to acknowledge with thanks the receipt of your D.O. No 3070 of 28th Mar 1916 & the decision & to request that the results of the analyses of the mixing ore & your report thereon may be sent as early as practicable to the Govt

over.

SUBJECT.

of India seem to be enquiries about the matter:

James Chen

K.G.

5/3/16

List of enclosures

Copied by

Examined by

PE—20,000—10-10-14

Geol 75-15-14.

D.O. No P.S. 1010 D 6.4.16.

30

My dear Sir,

In continuation of my demi-official letter No. C.S 72 dated the 28th March 1916, I write to inform you that the results of the analysis of Mr. Burn's instructions will be communicated to you early next week.

Yours sincerely

(Sd) H.D. M. Narasinga Rao.

674

To Major F.H. St. George Tucker
First Assistant Resident.

Geol 75-5-14A. Bangalore
7th Ap 16.

D. O. No. 3974

Dear Dr. Smeeth,

I am in receipt of your letter of the 28th March and wish to thank you for the trouble you have taken in connection with the analysis of antimony ore. As the results have to be communicated to the Residency, perhaps you will ~~very~~ kindly expedite the matter.

As regards the transfer of the license by Mr. Burr to a Bombay firm, I am informed that some information from the Residency is due. The reference will be disposed of as soon as that information is received.

You may go ahead with the preparation of the Bulletin. The other only final proofs sections may be put in type and sent up for approval.

~~I am afraid I cannot comply with your request regarding~~ we want the quarterly returns. ~~We~~ find them very useful here

I am sorry for the accidents on the Fields. They are happening in rapid succession.

Yours sincerely,

7.4.16. Dewan.

Dr. W.F. Smeeth, M.A;D.Sc.

(Your letter had been sent to the office and only came back yesterday. Hence the delay in sending you a reply.

No 3192. 32
Two

GOVERNMENT OF MYSORE

Rec'd at 5-20 P.M. June 8/14

DEPARTMENT OF MINES AND GEOLOGY,
MYSORE STATE.

Bangalore, 8th April 1916.

Dear Sir,

I beg to enclose a note in duplicate about the Antimony at Chitaldrug.

2. In case it should be desirable to send a wire in advance I would suggest the following.-

DIARY NO. 889

15-4-16
Geol
75-15
15.

"Antimony at Chitaldrug -
Ore stacks contain 3 tons running nearly 46 per cent and 11¾ tons running about 28 per cent of Antimony. Letter follows."

Yours sincerely,

M. Gracie

D.M. Narasinga Rao, Esquire, B.A.,B.L.,
Secretary to Government,
General Department.

Note on Antimony in the Chitaldrug District.

The antimony ore occurs about a mile S.E. of the village of Chikkannanhalli and about 9 miles north of Chitaldrug. It has been known for a number of years and has been examined and prospected at various times. Pits have been dug and some ore collected which was considered too poor to be worth working. Owing to the recent demand for antimony and the high prices offered, a fresh prospecting license was taken out by Mr. Burr of Bangalore towards the close of 1915 under which a considerable amount of excavation has been done and some ore collected.

2. I paid a visit to the block from the 21st to 24th March 1916 for the purpose of inspecting the work and sampling the ores.

3. The ore occurs in an area close to the nulla running E & W about ½ a mile south of △ 2582 and pieces of float can be picked up, over a distance of 200 yards or so, in the rubble in the nulla and on the banks - especially the north bank. From the pits which have been sunk to a depth of 20 ft. it is found that the ore occurs in a narrow quartz veins in chloritic trap. The vein or veins are narrow, from a few inches to a foot or two in width and dip towards the E & S.E. at gentle inclinations of from 10° to 30°. The quartz carries a little ore some of which is Stibnite (Sb_2S_3 or Sb_2O_3) and most of which is Cervantite (Sb_2O_4) or Antimony Ochre. Most of the mineral excavated from these veins is too poor to be worth treatment, but a few tons might be picked out which would be of distinctly lower grade than Grade II mentioned below.

4. In the nulla itself some large blocks were found which probably once formed an upper portion of the vein and which contained a good deal more of the sulphide and oxide than the vein material excavated from the pits. Probably they represent a portion of the vein containing fairly large seggregations of the sulphide part of which has been converted subsequently to oxide. The ore stacks which have been collected consist almost entirely of these loose boulders which have been broken up and roughly dressed and of smaller pieces of float ore which have been picked up.

5. I found that the stacks were of very mixed composition and quite unsuitable for sampling, so I had them pulled down and sorted the whole into two grades :-

Grade I containing most of the sulphide with some oxide

and

Grade II consisting mainly of oxide with some sulphide which could not be easily separated.

Grade I formed a stack 6'.4" x 7' x 1'.2" giving 51.7 cubic feet of ore and weighing approximately 3 tons.

An average sample of the stack was taken and yielded the following analysis.-

Silica	31.38 %
Total Antimony	45.84 "
Total Sulphur	6.61 "
Caculated Sb_2S_3	= 23.12 %
Caculated Sb_2O_4	= 36.80 "
Gold	trace
Silver	0.35 Ozs. per ton

Grade II formed a stack 9' x 9' x 2',10" giving approximately 229.5 cubic feet weighing 11¾ tons. An average sample was taken and gave the following analysis.-

Silica	52.33 %
Total Antimony	28.29 "
Total Sulphur	0.73 "
Calculated Sb_2S_3	= 2.55 %
Calculated Sb_2O_4	=33.56 "
Gold	trace
Silver	0.4 ozs. per ton

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6. From the analysis it is obvious that the ores as a whole are not of high grade and that Grade I contains a large admixture of oxide which could be dressed out only with considerable difficulty. Taking the two stacks we may reckon that we have about 1.37 tons of metallic antimony in Grade I and about 3.32 tons of matallic antimony in Grade II. It is difficult to say how much could be recovered by smelting. The loss in antimony is usually large and the loss on the low grade stuff would doubtless be very considerable. At present there is no more ore comparable to Grade I in sight, but a few more tons comparable to Grade II might be sorted from the dumps.

7. I am informed that 1 ton of sulphide ore and 1 ton 6 cwts. of oxide ore have been sent to Bombay for experimental treatment and some information as to the results of smelting may be expected shortly.

8. I doubt if the antimony which may be obtained will pay for the money spent on it, even at present prices. It may however

however serve to recoup some of the expenditure and help towards further prospecting, but unless something better is met with the proposition has little chance of paying its way.

9. The ore contains a little iron but appears to be practically free from lead, zinc, tin and arsenic.

Bangalore,
7th April 1916.

Director,
Department of Mines & Geology.

Geol 75-15-14

D.O. No Pol 1021 Enone 37

8-4-16 C. R.S.

Bangalore
8th April 1916.

My dear Sir

In continuation of my demi-official letter no. Pol 1010, dated the 6th April 1916, - I send herewith a copy of the note drawn up by Dr Russell about the Antimony at Chitaldrug.

In case it should be desirable to send a wire in advance to the Govt of India, the following text is suggested: -

"Antimony at Chitaldrug - ore stocks contain 3 tons running nearly 46 %. and 11 3/4 tons running about 28 % of Antimony Letter follows"

Yours sincerely
(Sd) D. M. Narasinga Rao

Major F. H. St George Locker
First Assistant Resident.

Seen by Dewan
Locker
14.4.16.